

# Lift bridge operations in Winnebago County

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#### Contact information:

WisDOT Northeast Region 944 Vanderperren Way Green Bay, WI 54304

Mailing address: P.O. Box 28080 Green Bay, WI 54324-0080

Phone: (920) 492-5643 Fax: (920) 492-5640

E-mail:

greenbay.dtd@dot.state.wi.us

WisDOT Web site: www.dot.wisconsin.gov

Neil Michaelson, PE Regional Bridge Engineer Phone: (920) 492-7170

Kim Rudat

Communications Manager Phone: (920) 492-5743

#### Mission statement:

To provide leadership in the development and operation of a safe and efficient transportation system.

#### Included in this issue:

- What's new in Menasha remote control
- "Bugs" worked out of camera systems in Oshkosh.
- Wisconsin Street bridge construction is on schedule

# What's new in Menasha remote control

The 2007 boating season is upon us, and with it comes a first for Menasha and Winnebago County—remote control operations of movable bridges. Crews have been busy over the winter installing new bridge control equipment to allow the Tayco Street bridge to be remotely operated from the Racine Street bridge.

Both bridges have been outfitted with video cameras and monitors to observe conditions, a public address system to communicate with pedestrians, motorists and boat operators at the Tayco Street Bridge, fiber-optic systems that integrate with Menasha Utilities' network, and upgraded traffic gates. These, along with other modifications to control systems, will allow remote control operation.

Currently, WisDOT is testing the newly installed equipment. Preliminary tests have gone well, and testing for these systems was completed at the end of May.

Over the course of the 2007 boating season, bridge operations will be transitioned from local site control to remote control.

The transition will be in three phases: local control, remote control with supervision, and full remote control operations.

During the first phase, April 26 to July 28, there will be an operator at both the Tayco Street and Racine Street bridges. Each bridge will be operated locally, allowing operators to become familiar with the new bridge operations.

Between July 28 and September 3, the Tayco Street bridge will be remotely operated from the Racine Street bridge. An operator will be stationed at both bridges in order to immediately address any unforeseen situations.

After September 3, plans call for the remote opera-

tions to be fully implemented, with both bridges operated remotely from the Racine Street bridge.

After September 3, 2007, remote operations will be fully implemented.

Lots of hard work and cooperation have gone into implementing the first remote control bridge operations in the region. Special thanks go to the city of Menasha, Menasha Utilities, bridge operators, and recreational boaters helping with this project. All are looking forward to the completion of this project, providing increased safety and service with reduced operating costs.



Tayco Street bridge in Menasha will be operated from the Racine Street bridge after July 28, 2007.

## "Bugs" worked out of camera systems in Oshkosh

Cameras and monitors have been operating for a full year on the on the Main Street, Oregon-Jackson Street and Congress Street bridges in Oshkosh. During the past year, bridge operators have found that sometimes the smallest things, spiders and raindrops, can cause the biggest headaches.

With the feedback from bridge operators, WisDOT has begun to implement several adjustments to make the system even more effective. These adjustments will alleviate awkward camera angles, shorten lag times, and of course, deal with those pesky spiders and raindrops.

The most noticeable change will be the cameras mounted on 30-foot high poles on the east shore of the Fox River near each of the bridges. Each bridge will have two cameras, one aimed upstream and one downstream, with a slight overlap in their field of view at the bridge. The images from these cameras will be displayed on side-by-side monitors to provide a panoramic view of vessels approaching, passing through, and leaving the bridge area. This will alleviate any awkward camera angles that can be disorienting for the bridge operator.

Another adjustment is shortening the lag time when the cameras are switching from one preset position to another. The lag time doesn't impact safety or the opening times of the bridge, but a shorter lag time adds to operator comfort in working with the cameras and monitors.

And then, there is Mother Nature. Raindrops and spider webs on the domes that cover the camera lens distort the light and focus of the

camera. By using rain-sheeting products similar to what is used on a car windshield, the raindrop problem has been lessened. Spider webs are a bit more challenging. There are products available to discourage spiders from attaching their webs to surfaces like the camera domes, but their success in an outdoor environment next to a river is still a question. In the end, a broom with a rag attached, used by housekeepers over the ages, may prove as the most successful solution to the "web-cam" problem.



Spiders create "web-cam" issues

### Construction of the new Wisconsin Street bridge is on schedule

Construction remains on schedule to replace the Wisconsin Street bridge in Oshkosh. To date, most of the work has been underground and in the river, constructing cofferdams and foundations for the massive piers that will support the new bridge. Over the course of the summer, a new 4-lane movable bridge will rise from these underwater foundations.

The new bridge is located about 85-feet to the north of the existing bridge, allowing passers-by a good view of the construction progress. The tentative schedule calls for the current bridge to be open until May 2008. The new bridge will be

opened in October 2008, and the old bridge will be demolished.

During construction, boaters are urged to use caution, as the opening in the area of the new bridge is 45-feet, as compared to a 70-foot opening for the current bridge.

The new Wisconsin Street bridge is key to remote bridge operations in Oshkosh, since it has been selected as the host site for remote operations.



Computer rendering of new Wisconsin Street bridge in Oshkosh